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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/813,929	03/21/2001	Tzvi Avnery	2251.2007-000	1834

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EXAMINER

MCCAMEY, ANN M

ART UNIT

PAPER NUMBER

2833

DATE MAILED: 07/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/813,929

Applicant(s)

AVNERY, TZVI

Examiner

Ann M McCamey

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 6-9, 11, 20, 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakano et al. in view of Avnery (US 5,962,995).

Nakano et al. disclose the invention substantially as claimed (See Office Action dated 2/10/03), but do not disclose the exit foil comprising titanium about 6 to 12 microns thick. Avnery teaches an exit foil comprising titanium with a similar thickness. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a titanium exit foil, since it has been held to be within the general skill in a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Claims 4, 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakano et al. in view of Avnery as applied to claims 1 and 3 above, and further in view of Lyons et al. (US 5,415,440).

Regarding claims 4, 5 and 10 Nakano et al. in view of Avnery disclose the invention substantially as claimed, but do not disclose the corrosion resistant layer

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comprising gold. Lyons et al. teach the use of gold in a corrosion resistant layer for an exit window. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use gold in the corrosion resistant layer, since it has been held to be within the general skill in a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Claims 12-14 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Avnery in view of Nakano et al.

Regarding claim 12, Avnery discloses the invention substantially as claimed, but does not disclose a corrosion resistant layer. Nakano et al. teach a corrosion resistant layer on an exit window foil. It would have been obvious to one having ordinary skill in the art at the time the invention was made add a corrosion resistant layer to the exit window foil to prevent corrosion.

Regarding claim 13, Nakano et al. teach the thinness of the corrosion resistant layer being about 4% to 8% the thickness of the exit window foil.

Regarding claim 14, Avnery disclose the exit window foil comprising titanium about 6 to 12 microns thick.

Regarding claim 17, Nakano et al. teach the corrosion resistant layer comprising diamond.

Regarding claim 18, Nakano et al. teach the corrosion resistant layer being about .25 to 2 microns thick.

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Regarding claim 19, Avnery disclose the corrosion resistant layer being formed by vapor deposition.

Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Avnery in view of Nakano et al. as applied to claims 12 and 14 above, and further in view of Lyons et al.

Avnery in view of Nakano et al. disclose the invention substantially as claimed, but do not disclose the corrosion resistant layer comprising gold. Lyons et al. teach the use of gold in a corrosion resistant layer for an exit window. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use gold in the corrosion resistant layer, since it has been held to be within the general skill in a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

Regarding claims 21-40, 43 and 44, the method claims are inherent to the claimed device in claims 1-20, and are rejected on the same grounds as their respective apparatus claims.

Response to Arguments

Applicant's arguments filed 5/14/03 have been fully considered but they are not persuasive.

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Applicant argues that the combination of Nakano with Avery is not obvious since Nakano teaches against employing titanium as the exit window foil. Applicant refers to the last two lines of page 8, which states "...it is clear that the electron beam transmission amount increases when the window foil base material is changed from titanium foil to aluminum alloy foil." This is not necessarily a teaching away from the reference. A teaching away requires that a reference explicitly state that a combination is inoperable. Nakano teaches titanium and aluminum as known materials for exit foils and also teaches providing a corrosion resistant layer on an exit foil. The mere fact that Applicant chose another known exit foil material that Nakano did not find ideal, does not render the claims patentable over the applied reference. This combination is thus deemed obvious in view of the prior art and the rejection has been maintained.

Applicant also argues that the Lyons reference teaches a much thicker exit window than what is claimed. However, the Lyons reference is used merely as a reference teaching gold as a potential corrosion resistant layer over an exit window. The base references teach ideal thicknesses for the titanium and corrosion resistant layers, and it would be obvious to one having ordinary skill in the art to use gold as taught by Lyons with the claimed thickness.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ann M McCamey whose telephone number is (703) 305-3422. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (703) 308-2319. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

AMM
July 29, 2003


RENEE LUEBKE
PRIMARY EXAMINER